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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,275	02/18/2004	Bruce Robert Jansen	RETE.111370	2052
5251	7590	07/09/2004	EXAMINER	
SHOOK, HARDY & BACON LLP 2555 GRAND BLVD KANSAS CITY,, MO 64108			CARRILLO, BIBI SHARIDAN	
			ART UNIT	PAPER NUMBER

1746

DATE MAILED: 07/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/781,275	JANSEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sharidan Carrillo	1746	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 15 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>051704</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-14 and 17-20, drawn to a method of cleaning a dynamic device, classified in class 134, subclass 26.
  - II. Claims 15-16, drawn to cleaning internal surfaces of a device, classified in class 134, subclass 22.1.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Mr. Marshall Honeyman on 6/28/04 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-14 and 17-20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 15-16 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1-14 and 17-20 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The recitation of a terpene and a nonionic surfactant are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Paragraphs 8, 23 and 26 of the specification teaches that the cleaning agent has 3 ingredients-terpene, steam, and nonionic surfactant. Applicant is only claiming a surfactant and a solvent for claim 1. Additionally, applicant is only claiming a cleaner for claim 17. Applicant fails to recite the combination of steam, nonionic surfactant and terpene, the ingredients of which are critical features of the instant invention.

8. Claims 1-14 and 17-20 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for terpene and nonionic surfactant, does not reasonably provide enablement for any solvent, cleaner, or surfactant. The specification does not enable any person skilled in the art to which it pertains, or with

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which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

The claims embrace an invention which contains any known solvent, cleaner, and surfactant, which could/can be selected from literally thousands. It does not appear to be feasible that any solvent or surfactant or cleaner would function in the present invention. Further, for one skilled in the art to reproduce the present invention (which must be possible, if the specification is adequate), there would clearly be undue experimentation to do so in an attempt to figure out which solvents and surfactant combinations work and which ones do not.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-14 and 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because it is unclear what is the vapor effluent. Is the effluent the contaminants present in the device or steam. In claims 1, 17 and 20, it is also unclear what is meant by activating the device. Claim 14 is indefinite because it is unclear what is the minimum temperature.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-2, 5-7, 9, 11, and 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Mehta et al. (5356482).

Mehta et al. teach cleaning heat exchangers, distillation columns, catalytic reactors, reflux systems, packing tower, with steam, surfactant, and organic solvent (col. 1, lines 20-25, col. 5, lines 55-58, col. 3, lines 35-45, col. 4, lines 40-50, 65-68, col. 5, lines 1-10). In reference to claim 1, Mehta et al. teach removing contaminants from the above systems by injecting steam and extractant which condenses on the inside surfaces of the vessel to remove and trap the contamination. In reference to removing vaporous effluent, the limitations are met since Mehta et al. teach removing benzene and other VOC by injection of steam into the vessel (col. 6, lines 60-68). In view of the indefiniteness of claim 1, the step of activating the device are met by the teachings of Mehta. Additionally, Mehta et al. teach cleaning distillation columns which include reflux systems, which are “activated” since the cleaning solution is pumped throughout. In reference to claim 2, the limitations are inherently met since Mehta teaches injecting the stem into the vessel prior to the introduction of solvent and surfactant (col. 3, lines 35-40). Col. 4, lines 1-5 teaches introducing stem at temperatures from 212-375°F. In

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reference to claims 5-6, refer to col. 4, lines 40-50. In reference to claims 7 and 9,

Mehta teaches limonene. In reference to claim 11, refer to col. 5, lines 45-50.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. Claims 8, 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mehta et al. (5356482).

Mehta et al. teach the invention substantially as claimed with the exception of the specific terpenes as recited in claims 8 and 10. Mehta et al. teach that various terpenes can be used.

It would have been obvious to a person of ordinary skill in the art to modify the method of Mehta to include the menthane and pine terpene since Mehta teaches that various other terpenes can be used.

Mehta et al. do not teach cleaning a pump. However, Mehta et al. teach using the method to clean process equipment. It would have been obvious and within the level of the skilled artisan to have modified the method of Mehta to include cleaning pumps since Mehta et al. teach using the composition to clean processing equipment in the petroleum refining industry.

### ***Double Patenting***

17. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Omum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double



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patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

18. Claims 1-12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 and 14-15 of U.S. Patent No. US2004/0102351A1.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are directed to cleaning a vessel and a dynamic device using the combination of steam, surfactant, and solvent.

19. Claims 1-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 4-11 of copending Application No. 10/447441. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are directed to cleaning a vessel and a dynamic device using the combination of steam, surfactant, and solvent.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hashimoto teaches cleaning with a solvent and surfactant. Mehta et al. teach cleaning with a solvent, surfactant, and steam. Tedder teaches a distillation tower having a pump. Loucks teaches cleaning metal surfaces with steam, solvent, and surfactant.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharidan Carrillo whose telephone number is 571-272-1297. The examiner can normally be reached on Monday-Friday, 6:00a.m-2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sharidan Carrillo  
Primary Examiner  
Art Unit 1746

bsc



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PRIMARY EXAMINER